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9. (Amended) A memory cell comprising:

a semiconductor substrate having a first region and a second region of one conduction type and a third region therebetween of an opposite conduction type; and

a gate insulating layer formed over said substrate, the gate insulating layer having a first thickness formed over said first region and said second region, and a second thickness formed over said third region, said first thickness being greater than said second thickness; and

an ONO stack formed on said gate insulating layer.

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10. (Amended) A method for fabricating a memory cell, the method comprising: providing a semiconductor substrate having a first region and a second region of one conduction type and a third region therebetween of an opposite conduction type;

forming a first portion of a gate insulating layer over said first region and said second region; and

etching said first portion of said gate insulating layer over said third region to form a second portion,

said first portion having a first thickness said second portion having a second thickness, said first thickness being greater than said second thickness.

Please cancel Claim 11.

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12. A method as in claim 10, wherein said first thickness is between about 20 and 30 nm and wherein said second thickness is between about 8 and 11 nm.

Please add Claims 13-22.

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- 13. (New) A memory cell as in claim 8, wherein said first thickness is greater than said second thickness.
- 14. (New) A memory cell as in claim 8, wherein said first thickness is between about 20 and 30 nm and wherein said second thickness is between about 8 and 11 nm.

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- 15. (New) A memory cell as in claim 8, wherein the electric field in a region of overlap between said gate insulating layer and said first and said second regions is between about 4 Mv/cm and 6 Mv/cm.
- 16. (New) A memory cell as in claim 8, wherein the electric field in a region of overlap between said gate insulating layer and said third region is between about 8 Mv/cm and 11 Mv/cm.
- 17. (New) (New) A memory cell as in claim 8, wherein said gate insulating layer comprises SiO₂.
- 18. (New) A memory cell as in claim 9, wherein said first thickness is greater than said second thickness.
- 19. (New) A memory cell as in claim 9, wherein said first thickness is between about 20 and 30 nm and wherein said second thickness is between about 8 and 11 nm.
- 20. (New) A memory cell as in claim 9, wherein the electric field in a region of overlap between said gate insulating layer and said first and said second regions is between about 4 Mv/cm and 6 Mv/cm.
- 21. (New) A memory cell as in claim 9, wherein the electric field in a region of overlap between said gate insulating layer and said third region is between about 8 Mv/cm and 11 Mv/cm.
- 22. (New) A memory cell as in claim 9, wherein said gate insulating layer comprises SiO₂.

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